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April 14, 2000

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Ex Parte: Response of GTE Service Corporation to Ex Parte Presentations of AT&T, Dated February 16 and February 28, 2000.

**CC Docket No. 96-45 – Universal Service/Proxy Cost Models
CC Docket No. 97-160 – Forward-Looking Cost Mechanism**

Dear Ms. Salas:

On February 16 and February 28, 2000, AT&T filed two *ex parte* letters proposing modifications to the Federal Communication Commission's ("FCC") universal service cost model's ("FCC Model") code and an analysis of the prim algorithm's next node selection criteria. GTE responds to these *ex parte* submissions herein.

While GTE agrees that the FCC Model continues to suffer from many coding, methodological, and input flaws, several of AT&T's proposed modifications lacked sufficient detail to allow for proper evaluation. The FCC must not adopt these proposed coding changes until sufficient detail is provided to allow interested parties a meaningful opportunity to review and comment upon them.

As to AT&T's remaining proposals, GTE directs the Commission's attention to four areas in which no correction to the code is necessary or in which AT&T's proposals serve to exacerbate, not solve, current deficiencies that it perceives to be resident in the FCC Model's code.

1. Overlapping Microgrids.

AT&T has proposed a uniform reduction in the 500 foot buffer for all clusters that face overlap of microgrids in adjacent clusters. However, with this proposal AT&T seeks to solve a negligible problem with an extremely problematic solution that will lead to an uncalled for reduction in cluster size.

The FCC Model includes a 500 foot buffer around each cluster in order to ensure that no customer location is placed on a cluster boundary. AT&T's *ex parte* submission does not contest the use of a 500 foot buffer in general, but objects to its use only in situations where the buffer causes populated microgrids from two adjacent clusters to overlap. AT&T's concern is that in

such situations the model may engineer plant twice to serve the same customer.

Such concern is misguided, however, and AT&T's proposal is unnecessary and causes serious problems. The problem of engineering plant twice for the same customer does not actually occur in the FCC Model. This is because two overlapping microgrids would be served by two different Serving Area Interfaces in two independent clusters. The plant in one microgrid, therefore, cannot be used to serve the other.

As a solution to its phantom problem, AT&T proposes to uniformly reduce the buffer size for the whole cluster to prevent overlap of adjacent microgrids. Even if such overlap were a problem, which as explained above it is not, the overlap occurs for relatively few customers, and usually on only one side of a cluster. Reducing the buffer size uniformly would in contrast affect all microgrids on the periphery of the cluster and would thus impact many more customers located close to the boundary. The proposed uniform reduction of the buffer size would be an unnecessarily broad measure and would re-introduce the problem of locating customers on a cluster boundary. The reduction would negate the whole purpose of the 500 foot buffer, causing an inappropriate reduction in cluster size. AT&T's proposal should not be adopted as it introduces problems that are far worse than the negligible issue that it tries to remedy.

2. Residual Line Counts.

AT&T contends that the procedure followed in the FCC Model leads to an "exaggerated count of lines that are residual to each microgrid." While GTE agrees that the FCC's partial line adjustment is flawed, it is not flawed in the manner AT&T suggests. As GTE explained in its *ex parte* of September 28, 1999, the FCC Model tends to understate customer locations, which together with the artificial reshaping and rearranging of lots, leads to understated costs.

It appears from the limited FCC Model documentation that the partial lines in the PNR location data is caused by PNR's use of probabilities to estimate line counts for individual customer locations. The estimates are needed because of inadequate information about line counts in individual locations. Since there is much less uncertainty associated with first lines, the partial lines, to a large extent, should reflect the probability of a location having a second line. As a result, the sum of each location's partial lines in an area reflect the proper number of second lines in an area and do not in any way exaggerate the count of lines that are residual to each microgrid as claimed by AT&T.

AT&T's suggestion of using only the sum of lines residual to a microgrid is methodologically flawed since it does not reflect the unallocated second lines in an area. In addition, it introduces an assumption that is even more problematic than the assumption inherent in the FCC's methodology. The FCC Model trues up lines at a study area level, which means that while each location may have different probabilities of having a second line, the count of second lines are accurately known only at the study area level, but not at lower levels, such as clusters and microgrids. By summing up the second line probabilities in a cluster into whole lines and then redistributing

them over the microgrids in the cluster, the FCC's partial line adjustment in effect presumes that the count of second lines in a cluster is known with certainty, which, as explained above, is not true. The AT&T's proposed partial line adjustment is even worse in that it presumes that the count of second lines in a microgrid is known with certainty, which is even less true. Those presumptions can lead to incorrect line distribution in an area and thus questionable cost outcomes. Therefore, the solution suggested by AT&T would only exacerbate a problem that already exists in the Commission's partial line adjustment. In GTE's *Ex Parte* dated September 28, 1999, GTE explained in detail the problem with partial line count adjustment present in the FCC Model and still believes that the best way to solve the problem in partial line count adjustment present in the FCC Model is to adopt the proposed solution contained therein.

3. Structure Sharing.

AT&T did not adequately explain its structure sharing proposal to allow for in depth analysis. GTE acknowledges that feasible structure sharing should be accounted for in the FCC Model, but notes that AT&T failed to include certain additional costs that would accompany additional sharing. For example, structure sharing with distribution plant will impose additional constraints on feeder, forcing it to follow the alignment of the distribution plant rather than choosing the shortest distance. Thus the savings in structure may be offset by higher cable costs due to longer feeder lengths. Further, structure sharing requires additional planning costs, such as survey and engineering expenditures. AT&T did not submit to the FCC a cost analysis in their sensitivity runs. Prior to adoption of any structure sharing proposals, GTE asserts that the FCC must complete a cost analysis and account for the additional costs that will accompany such sharing.

4. Node Selection Criteria.

GTE has no objection to alternate optimization methodologies as long as they do not violate feasibility constraints or engineering criteria. However AT&T's submission regarding use of distance minimization as node selection criteria does not take into account constraints imposed by terrain or topography and incorrectly assumes perfect conditions over the entire area. In general, the optimization routines neglect real-world constraints that may preclude attainment of the level of minimization found in mathematically derived results. In addition, the optimization routines in the modeling exercise assume complete and perfect prior knowledge and do not take into account uncertainties that are inherent in real life situations. The presence of incomplete information and uncertainties would hardly allow for such seamless optimization routines and would certainly result in increased costs that are not captured by the FCC Model.

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Pursuant to Section 1.126(a)(1) of the Commission's rules, GTE is submitting an original and one copy of this letter to the Office of the Secretary. Please associate this notification with the record in the above-captioned proceeding.

If you have any questions regarding this matter, please call me at (202) 463-5293.

Sincerely,

A handwritten signature in dark ink, appearing to read "W. Scott Randolph", with a long, sweeping horizontal line extending to the right.

W. Scott Randolph
Director, Regulatory Matters

cc: Katherine Schroder
Katie King
Bob Loube
Bill Sharkey
Brian Clopton
Gene Fallano
Jeff Prsbrey
Sheryl Todd